

TRANSMITTAL LETTER TO THE UNITED STATES

1247-0791-0V PCT

DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATION NO (IF KNOWN, SEE 37 CFR

CONCERNING A FILING UNDER 35 U.S.C. 371

09/147696

INTERNATIONAL APPLICATION NO.

PCT/FR98/01269

INTERNATIONAL FILING DATE

JUNE 17, 1998

PRIORITY DATE CLAIMED

JUNE 18, 1997

TITLE OF INVENTION

ARMOURED GLAZING, IN PARTICULAR FOR VEHICLE FIXED OR MOBILE SIDE GLAZING

300 Rec'd PCT/PTO 18 FEB 1999

APPLICANT(S) FOR DO/EO/US

Noel GOURIO

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ A copy of the International Search Report (PCT/ISA/210).
8. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
9. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
10. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 18 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
A **SECOND** or **SUBSEQUENT** preliminary amendment.
16. ☐ A substitute specification.
17. ☐ A change of power of attorney and/or address letter.
18. ☐ Certificate of Mailing by Express Mail
19. ☒ Other items or information:

Request for Consideration of Documents Cited in International Search Report

Notice of Priority

PCT/IB/304

PCT/IB/308

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR		INTERNATIONAL APPLICATION NO. PCT/FR98/01269		ATTORNEY'S DOCKET NUMBER 1247-0791-0V PCT	
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20. The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :				CALCULATIONS PTO USE ONLY	
<input checked="" type="checkbox"/> Search Report has been prepared by the EPO or JPO		\$840.00			
<input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482)		\$670.00			
<input type="checkbox"/> No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2))		\$760.00			
<input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2) paid to USPTO		\$970.00			
<input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4)		\$96.00			
ENTER APPROPRIATE BASIC FEE AMOUNT =			\$840.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492 (e)).			<input checked="" type="checkbox"/> 20 <input type="checkbox"/> 30		
			\$130.00		
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	- 20 =	0	x \$18.00	\$0.00	
Independent claims	- 3 =	0	x \$78.00	\$0.00	
Multiple Dependent Claims (check if applicable).			<input type="checkbox"/>	\$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$970.00	
Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable).				<input type="checkbox"/>	\$0.00
SUBTOTAL =				\$970.00	
Processing fee of \$130.00 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492 (f)).				<input checked="" type="checkbox"/> 20 <input type="checkbox"/> 30	
				+	\$130.00
TOTAL NATIONAL FEE =				\$1,100.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).				<input type="checkbox"/>	\$0.00
TOTAL FEES ENCLOSED =				\$1,100.00	
				Amount to be: refunded	\$
				charged	\$

☒ A check in the amount of **\$1,100.00** to cover the above fees is enclosed.

☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees.
 A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **15-0030** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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 REGISTRATION NUMBER 30,996

SIGNATURE

Norman F. Oblon
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24,618
 REGISTRATION NUMBER

January 10, 1999
 DATE

1247-0791-0V PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :
NOEL GOURIO : ATTN: APPLICATION DIVISION
SERIAL NO: 09/147,696 :
FILED: February 18, 1999
FOR: ARMOURED GLAZING, IN
PARTICULAR FOR VEHICLE FIXED
OR MOBILE SIDE GLAZING

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend this application as follows.

IN THE SPECIFICATION

Pages 1-9, at the top of each, delete:

"WO 98/57805 1-9 (respectively) PCT/FR 98/01269"

and at the bottom of pages 1-9, paginate each --1, 2, 3, 4, 5, 6, 7, 8 and 9--, respectively.

Page 1, at the top of the page, above the title, insert:

--TITLE OF THE INVENTION--;

under the title, insert:

--BACKGROUND OF THE INVENTION

Filed of the Invention--;

above line 12 from the bottom of the page, insert:

--Description of the Background--.

Page 3, at the top of the page, insert:

--SUMMARY OF THE INVENTION--;

after line 7, insert:

--BRIEF DESCRIPTION OF THE DRAWINGS--

Figure 1 illustrates a glass partition of the present invention wherein insert 3 is positioned as an extension of layer 2.

Figure 2 is a variant of Figure 1, wherein insert 3 is positioned as an extension of layer 2, and emerges from the laminated structure.

Figure 3 is another embodiment wherein layer 2 has an area which is in excess of all other layers making up the glass partition, and emerges from the laminated structure.

Figure 4 illustrates another embodiment of a glass partition made up of an outer sheet 10 and an inner stack of sheets 11.

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT--.

IN THE CLAIMS

Please cancel Claims 1-10 without prejudice and insert therefor new Claims 11-21:

--11. A laminated, armored, bulletproof or shatterproof, or combination thereof, glass partition, which comprises, over at least a portion of its periphery, one or several rigid protuberances, each of them perceptibly corresponding to a plane parallel to the surface

defined by the glass partition or an extension of this surface, and having a thickness allowing it to be inserted at least in part, temporarily or permanently, in the fillister of the opening for the glass partition.

12. The glass partition of Claim 11, wherein said rigid protuberances are in the extension of a single sheet making up the glass partition or of a single group of such adjacent sheets.

13. The glass partition of Claim 11, wherein at least one of said protuberances is made up of an insert positioned each time partially inside the laminated structure constituting the glass partition, in the extension of one or several adjacent sheets forming the latter, made of glass or vitroceraamics or plastic.

14. The glass partition of Claim 13, wherein said insert is positioned in the extension of a single interpolated adhesive layer of polyvinylbutyral (PVB) making up the glass partition.

15. The glass partition of Claim 11, wherein said at least one of said protuberances is constructed as part of a sheet of vitroceraamics or glass, and constitutes the emerging portion thereof, optionally covered in plastic or encapsulated in a plastic film.

16. The glass partition of Claim 15, wherein said at least one of said protuberances is constructed as part of a sheet of chemically reinforced glass.

17. The glass partition of Claim 11, wherein said outer surface is formed by a sheet of glass or vitroceraamics.

18. The glass partition of Claim 11, which comprises successively, inward in relation to said protuberance or protuberances, toward the cockpit of the vehicle or the interior of the

structure protected, a stack of alternating sheets of glass and adhesive layers of polyvinylbutyral (PVB), with outer sheets of glass, then an interpolated sheet of polyurethane (PU), then a sheet of polycarbonate (PC) coated with a hard scratch-resistant lacquer and constituting the inner surface of the glass partition.

19. The glass partition of Claim 11, wherein the rigid protuberance or protuberances which it comprises have a thickness equivalent to that of a conventional glass partition for a transport vehicle.

20. The glass partition of Claim 19, wherein the outer surface is positioned in the continuity of the body.

21. A lateral automotive glass partition, which comprises the glass partition of Claim 19, which is fixed or movable in the vertical or horizontal direction.--

REMARKS

Claims 1-10 have been cancelled. Claims 11-21 have been added and are now active in this case.

All of the above amendments are fully supported by the claims and disclosure as originally filed. No new matter has been added. The specification has been amended to include appropriate headings.

Accordingly, it is believed that the present application is now in condition for examination on the merit. Favorable consideration is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
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ARMoured GLAZING, IN PARTICULAR FOR VEHICLEFIXED OR MOBILE SIDE GLAZING

This invention relates to a laminated, armored, bulletproof and/or shatterproof glass partition, which may be utilized for the protection of buildings or armored vehicles such as private vehicles, military vehicles or vehicles for the transport of cash. This type of glass partition is capable of being installed on vehicles for road, rail, marine or air transport.

Considerable efforts have been made with a view to improving the resistance of armored glass partitions, in particular with respect to increasingly heavy bullets and increasingly powerful and concentrated impacts on a weak surface.

Several approaches occurred to inventors for improving the ballistic performances of these glass partitions.

In particular, some solutions have been proposed to improve the fastening of aircraft windshields. These do not have to withstand impacts of bullets, but only birds which may

collide with them, and accordingly have a structure differing in the nature of the components of the laminate and more delicate than that of the armored glass partition now under consideration.

Thus, the patent US-A-3,953,630 describes an aircraft windshield comprising a flexible insert with high mechanical resistance, composed of a strip of fabric of glass fibers impregnated with rubber, or even polyester fibers or stainless steel wires. This insert extends beyond the periphery of the windshield and its emerging end is made rigid so as to be bolted to the body of the aircraft.

The application FR-A1-2 612 174 relates to an aircraft windshield composed of two polycarbonate sheets with a soft interpolated polyurethane layer sandwiched between them. Because of the low rigidity of the whole thus constituted, it is not possible to contemplate an assembly identical to that of a glass windshield, by mere clamping in the fillister, without risking an ejection of the windshield due to substantial deformations of the polycarbonate. The document nonetheless makes such an assembly possible, by proposing to countersink in the periphery of the interpolated layer a rigid belt, of metal for example, on a level with the edge of the windshield.

A comparable rigid belt, intended for a glass partition for a pressurized aircraft cockpit, comprising two sheets of glass and an interpolated plastic layer, also is disclosed by patent application FR-A1-2 720 029. This belt, also countersunk in the periphery of the interpolated layer, extends beyond the periphery of the glass partition only possibly to cover the edge thereof partially or completely, the belt then having a corresponding L, respectively T profile.

According to another approach, the patent US-A-2,991,207 describes an aircraft windshield with improved resistance to impacts of birds composed of two sheets of glass and one soft interpolated polyvinylbutyral layer. The latter extends beyond the periphery of the sheets of glass; a reinforcement piece, countersunk in the soft layer, extends from the emerging edge thereof to the interior of the laminate, that is, between the sheets of glass.

Surprisingly, the inventors became aware that the transposition to the armored glass partitions of the techniques described previously relating to the aircraft windshields, under the specific conditions of the invention such as defined below, was capable of improving their resistance to impacts of bullets or other projectiles from firearms and ensuring their holding in the fillisters after the first impact.

This objective was able to be achieved by the invention which has as its subject a laminated, armored, bulletproof and/or shatterproof glass partition comprising, over at least a portion of its periphery, one or several rigid protuberances, each of them being perceptibly inscribed in a plane parallel to that of the glass partition or its extension and having at least one peripheral portion with a thickness less than or equal to that of the fillister of the opening for the glass partition, so as to be able to be inserted therein.

Said rigid protuberances preferably are in the extension of a single component sheet of the glass partition or of a single group of such adjacent sheets. In other words, the protuberances are located perceptibly in alignment in a single position with respect to the thickness of the glass partition.

This characteristic facilitates the construction of the frames for windows or the associated bodies, by allowing the insertion of the protuberances in a single standard fillister.

Other characteristics and advantages of the invention will become evident in the light of the following description of the attached drawings, in which figures 1 to 4 respectively are schematic representations of four different embodiments of the invention.

The glass panel of Figure 1 is composed, from the outside - that is from the side at which the impact is likely to occur - toward the inside:

- of a vitroceramic sheet 1, 6 mm in thickness,
- of an interpolated adhesive layer 2 of polyvinylbutyral (PVB), 3 mm in thickness,
- of a sheet of glass 4
- of an interpolated adhesive layer 5 of PVB,
- of a sheet of glass 6,
- of an interpolated adhesive layer 7 of polyurethane (PU), and
- of a sheet 8 of polycarbonate (PC) the inner surface of which generally is coated with streak-resistant, for example polysiloxane-based lacquer, over a thickness equal at the very most to 15 μm , but more often on the order of 2 to 7 μm .

The sheet 8 also is coated, in whole or in part, as need be, with a coloring layer in particular following an upper horizontal

strip, or with any other functional layer customarily applied on the inner surface of a windshield.

The stratified armor structure, composed of sheets and layers 4, 5, 6, 7 and 8, has a thickness ranging approximately between 30 and 40 mm. In addition, one may consider interpolating, between sheet 6 and layer 7, successively from the first to the second, one or several stacks consisting, in order, of a PVB layer then a sheet of glass. The thickness of the glass partition thereby is increased proportionally; preferably, the number of sheets of glass contained in this stack of alternating sheets of glass and PVB layers, with outer glass sheets, shall not exceed 4 at the very most, or in particular 3.

In the bulletproofing and shatterproofing application of the invention, the use of hardened glass, that is, glass having been subjected to a thermal hardening treatment, is avoided because of its tendency to break into many small-sized splinters on the first impact of a bullet. The sheets of glass here are composed of annealed glass or chemically reinforced glass which advantageously are damaged only locally after having sustained a bullet impact.

The outer sheet 1 of the glass partition also could consist of annealed glass or chemically reinforced glass, its thickness

being equivalent to that of the vitroceramic sheet 1 of Figure 1.

All the sheets and layers making up the glass partition are, of course, transparent.

According to a first principal embodiment of the invention, represented in Figures 1 and 2, at least one of the protuberances consists of a metal insert 3 of stainless steel penetrating into the laminated glass partition to an approximate depth of some fifteen millimeters and emerging by about the same amount.

In accordance with Figure 1, insert 3 is located in the extension of layer 2; its thickness also is 3 mm.

Figure 2 represents a variant of the same embodiment in which insert 3, identical to that which has just been described, is located in the extension of sheet 2, made of vitroceramics or, possibly, of annealed or chemically reinforced glass. Insert 3 also emerges from the laminated structure by some fifteen millimeters.

Insert 3, however, is not represented here in direct contact with sheet 2 made of vitroceramics or glass, but slightly separated. As insert 3 and sheet 4 are partially countersunk in

the case of one, and almost completely in the case of the other, in an adhesive layer 9 made of PVB, the latter, in the course of manufacture of the glass partition, will be likely to creep, including into the space left unoccupied between insert 3 and sheet 2. It is possible, however, to limit this unoccupied space to the point of eliminating it, the adhesive layer 9 then being replaced by two independent layers. By way of comparison, it is noted that the creep of the PVB in layer 2 of Figure 1 is limited by a side of sheet 1, the edge of insert 3 and a side of sheet 4, possibly to some minor, negligible seepages at the sheet 1-insert 3 and insert 3-sheet 4 interfaces.

The second principal embodiment is represented in Figure 3. The glass partition represented is distinguished essentially from that of Figure 2 in that at least one rigid protuberance is formed by the emerging portion of a continuous sheet 2 made of glass or vitroceraamics, in particular of chemically reinforced glass, with an area in excess of that of the other sheets making up the glass partition.

Sheet 2 is completely covered, except for its lower edge, in an adhesive layer 9 of polyurethane (PU). Under these circumstances, the creeping of the PU may be utilized during the construction of the laminate. When sheet 2 is made of chemically reinforced glass, it is strongly recommended to protect the

emerging portion thereof, considering its susceptibility to scratching. In order to do so, after manufacture of the sheet, an encapsulation of the emerging portion of the exposed sheet 2 in a film of suitable plastic also may be implemented.

According to an embodiment represented in simplified form in Figure 4, a glass partition is made up of an outer sheet or a stack of sheets 10 and an inner stack of sheets 11. The stack has an area less than that of the sheet or stack 10, so that the periphery of the second extends uniformly beyond that of the first.

The sheet or stack 10 is duly made up of a sheet of chemically reinforced glass, while stack 11 is of the type described previously in relation to Figures 1 to 3.

A peripheral metal belt 12 is joined at one and the same time to the sheet or stack 10 and to the stack 11, in the manner represented in the Figure; a joining by gluing may be considered.

This type of configuration achieves excellent bulletproof and shatterproof properties. The whole constituted by the edge of the sheet or stack 10 and the belt 12 may be inserted into the fillister of an opening or simply positioned supported and more

or less nested in relation to the structure of this opening directed outward, according to the shapes of openings used.

Although the bulletproof and/or shatterproof glass partitions of the invention are suitable for the building trade as well as for all transport vehicles, the glass partitions for road-transport vehicles, and specifically fixed or in particular movable lateral glass partitions for private armored vehicles, are especially contemplated.

Advantageously, the rigid protuberance or protuberances has/have a thickness equivalent to that of a conventional glass partition for an automotive vehicle, and thus easily are inserted into the fillister instead of a conventional glass partition.

In the case of a glass partition which is movable, generally in the vertical direction, the problem of susceptibility to scratching of a protuberance made of chemically reinforced glass, necessitating its covering or encapsulation, derives precisely from these back-and-forth movements, producing friction in the fillister.

According to another advantageous characteristic, the outer surface of the glass partition is placed exactly in the continuity of the body. The aerodynamic characteristics of the

vehicle thereby are improved, in known manner, through a decrease in its coefficient of penetration in air.

The glass partition of the invention is distinguished in particular in the sense that the holding of the glass partition in the fillister continues to be ensured, to a great extent, after the first impact, so that a resistance to a second impact, or even to a subsequent impact, may be achieved, according to the laminated structures used, the nature of the projectiles and the force of firing. By comparison with known armored glass partitions, that of the invention withstands heavier projectiles, more forceful and more numerous impacts, whether simultaneous or consecutive.

CLAIMS

1. Laminated, armored, bulletproof and/or shatterproof glass partition, **characterized in that** it comprises, over at least a portion of its periphery, one or several rigid protuberances, each of them perceptibly corresponding to a plane parallel to the surface defined by the glass partition or the extension of this surface, and having a thickness allowing it to be inserted at least in part, temporarily or permanently, in the fillister of the opening for the glass partition.

2. Glass partition in accordance with claim 1, **characterized in that** said rigid protuberances are in the extension of a single sheet making up the glass partition or of a single group of such adjacent sheets.

3. Glass partition in accordance with claim 1 or 2, **characterized in that** said or at least one of said protuberance(s) is/are made up of an insert (3) in particular of metal positioned each time partially inside the laminated structure constituting the glass partition, in the extension of one or several adjacent sheets (2) forming the latter, made of glass or vitroceraamics or plastic.

4. Glass partition in accordance with claim 3, **characterized in that** said insert (3) is positioned in the extension of a single interpolated adhesive layer (2) of polyvinylbutyral (PVB) making up the glass partition.

5. Glass partition in accordance with claim 1 or 2, **characterized in that** said or at least one of said protuberance(s) is constructed as part of a sheet of vitroceramics or glass (2), in particular of chemically reinforced glass, and constitutes the emerging portion thereof, possibly covered in plastic (9) or encapsulated in a plastic film.

6. Glass partition in accordance with any of claims 1 to 5, **characterized in that** its outer surface, likely to be damaged first by a projectile, is formed by a sheet of glass or vitroceramics (1).

7. Glass partition in accordance with any of claims 1 to 6, **characterized in that** it comprises successively, inward in relation to said protuberance or protuberances, that is, toward the cockpit of the vehicle or the interior of the structure protected, a stack of alternating sheets of glass (4, 6) and adhesive layers (5) of polyvinylbutyral (PVB), with outer sheets

of glass (4, 6), then an interpolated sheet (7) of polyurethane (PU), then a sheet (8) of polycarbonate (PC) generally coated with a hard scratch-resistant lacquer and constituting the inner surface of the glass partition.

8. Glass partition in accordance with any of claims 1 to 7 for a transport vehicle, **characterized in that** the rigid protuberance or protuberances which it comprises have a thickness equivalent to that of a conventional glass partition for a transport vehicle.

9. Glass partition in accordance with claim 8 in which the outer surface is positioned in the continuity of the body.

10. Lateral automotive glass partition in accordance with claim 8 or 9 fixed or movable in the vertical or horizontal direction.

ABSTRACT

The invention concerns an armoured laminated bullet-proof and/or splinter-proof glazing, comprising on at least part of its periphery, one or several rigid protuberances (3), each of which belonging substantially to a plane parallel to that of the window or its extension, and having a thickness for its being inserted at least partially, temporarily or permanently, in the window aperture rabbet.

Fig. 1

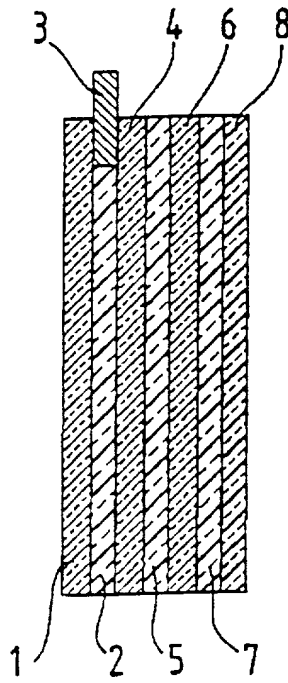


Fig. 2

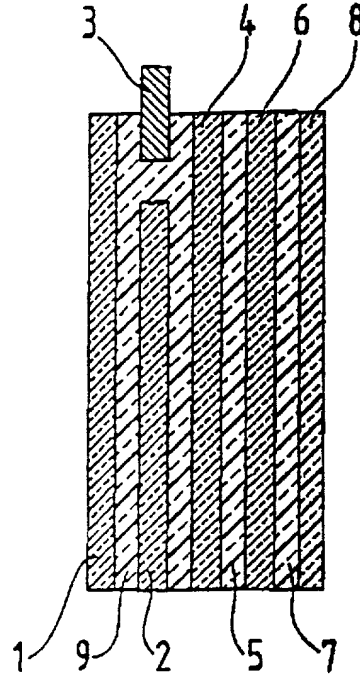


Fig. 3

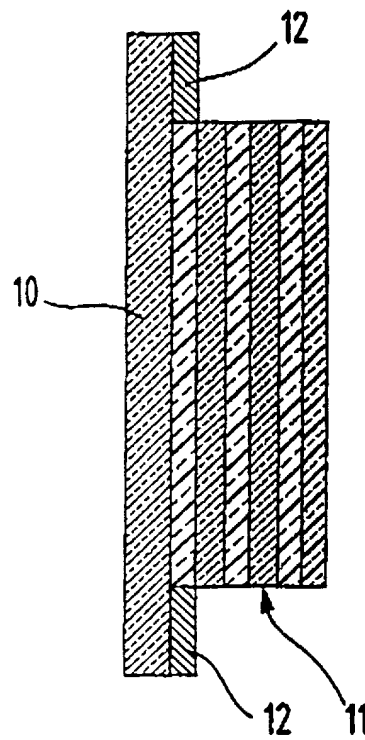
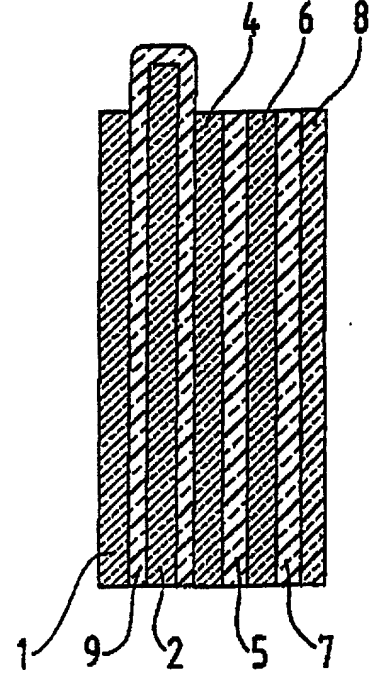


Fig. 4

Declaration, Power Of Attorney and Petition

Page 1 of 2

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

ARMoured GLAZING, IN PARTICULAR FOR VEHICLE FIXED OR MOBILE SIDE GLAZING

the specification of which

☐ is attached hereto.

☒ was filed on February 18, 1999 as
Application Serial No. 09/147,696
and amended on _____.

☒ was filed as PCT international application
Number PCT/FR98/01269
on JUNE 17, 1998,
and was amended under PCT Article 19
on _____ (if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed
<u>97/07561</u>	<u>FRANCE</u>	<u>18 JUNE 1997</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

We (I) hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status (pending, patented, abandoned)
<u>PCT/FR98/01269</u>	<u>JUNE 17, 1998</u>	_____
_____	_____	_____
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And we (I) hereby appoint: Norman F. Oblon, Reg. No. 24,618; Marvin J. Spivak, Reg. No. 24,913; C. Irvin McClelland, Reg. No. 21,124; Gregory J. Maier, Reg. No. 25,599; Arthur I. Neustadt, Reg. No. 24,854; Richard D. Kelly, Reg. No. 27,757; James D. Hamilton, Reg. No. 28,421; Eckhard H. Kuesters, Reg. No. 28,870; Robert T. Pous, Reg. No. 29,099; Charles L. Gholz, Reg. No. 26,395; Vincent J. Sunderdick, Reg. No. 29,004; William E. Beaumont, Reg. No. 30,996; Steven B. Kelber, Reg. No. 30,073; Robert F. Gnuse, Reg. No. 27,295; Jean-Paul Lavalleye, Reg. No. 31,451; Stephen G. Baxter, Reg. No. 32,884; Martin M. Zoltick, Reg. No. 35,745; Robert W. Hahl, Reg. No. 33,893; Richard L. Treanor, Reg. No. 36,379; Steven P. Weihrouch, Reg. No. 32,829; John T. Goolkasian, Reg. No. 26,142; Marc R. Labgold, Reg. No. 34,651; Richard L. Chinn, Reg. No. 34,305; Steven E. Lipman, Reg. No. 30,011; Carl E. Schlier, Reg. No. 34,426; James J. Kulbaski, Reg. No. 34,648; Catherine B. Richardson, Reg. No. 39,007; Richard A. Neifeld, Reg. No. 35,299; J. Derek Mason, Reg. No. 35,270; Surinder Sachar, Reg. No. 34,423; Sharon E. Crane, Reg. No. 36,113; Christina M. Gadiano, Reg. No. 37,628; Jeffrey B. McIntyre, Reg. No. 36,867; and Paul E. Rauch, Reg. No. 38,591; our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to the firm of OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., whose Post Office Address is: Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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March 25th, 99